WHAT IS CLAIMED IS:

1. A cavity down ball grid array packaging structure, comprising:

a heat spreader including a chip-mounting region at a central portion and a substrate-mounting region located around the chip-mounting region;

a substrate bonded to the heat spreader in the substrate-mounting region, wherein the substrate comprises at least an insulating layer, a patterned wiring layer, and a via electrically connected to the heat spreader, and the patterned wiring layer comprises at least a ball pad, a first contact pad, and a first ground pad spaced apart from and electrically connected to the via;

a chip having an active surface and a corresponding back surface, the chip being bonded in the chip-mounting region of the heat spreader, wherein the active surface of the chip includes at least a second contact pad electrically connected to the first contact pad and a second ground pad electrically connected to the heat spreader;

an encapsulant material encapsulating the chip, the first and second contact pads; and

a plurality of solder balls attached to the ball pad and first ground pad.

2. The packaging structure of claim 1, wherein the heat spreader further includes a ground substrate bonded onto the substrate-mounting region, the ground substrate having an opening exposing the heat spreader at the chip-mounting region to form a cavity.

3. The packaging structure of claim 2, wherein the second ground pad of the chip is connected to the ground substrate on the heat spreader via a conductive wire.

4. The packaging structure of claim 1, wherein the heat spreader further includes a cavity therein at the chip-mounting region and the chip is mounted on a bottom surface of the cavity in the heat spreader.

5. The packaging structure of claim 4, wherein the second ground pad of the chip is connected to the heat spreader via a conductive wire.

6. The packaging structure of claim 1, wherein the first and second contact pads are connected to each other via a conductive wire.

7. The packaging structure of claim 1, wherein the via contacts with the first ground pad.

8. The packaging structure of claim 1, wherein the first ground pad is electrically connected to the via by means of a ground conductive wiring.

9. The packaging structure of claim 8, wherein the via is formed by disposing a conductive ball in a via opening and reflowing the conductive ball to form a conductive material filling the via opening and overlapping onto the ground conductive wiring.

10. A cavity down ball grid array packaging carrier, suitable for use in a chip packaging structure, the cavity down ball grid array carrier comprising:

a heat spreader including a chip-mounting region at a central portion and a substrate-mounting region located around the chip-mounting region; and

a substrate bonded to the heat spreader over the substrate-mounting region, wherein the substrate comprises at least an insulating layer, a patterned wiring layer, and a via connected to the heat spreader, and the patterned wiring layer comprises at least a ball pad, a contact pad, and a ground pad spaced apart from and electrically connected to the via.

11. The packaging carrier of claim 10, wherein the heat spreader further includes a ground substrate bonded onto the substrate-mounting region, the ground substrate having an opening exposing the heat spreader at the chip-mounting region to form a cavity.

12. The packaging carrier of claim 10, wherein the heat spreader further includes a cavity therein at the chip-mounting region and the chip is mounted on a bottom surface of the cavity in the heat spreader.

13. The packaging carrier of claim 10, wherein the via contacts the ground pad.

14. The packaging carrier of claim 10, wherein the patterned wiring layer further includes a ground conductive wiring connecting the via to the ground pad.